

**Department of Conservation
California Abandoned Mine Lands Forum
1027 10th Street
Sacramento, CA**

**November 12, 2003
Meeting Notes**

Facilitator and Meeting Summary: Carol Atkins, Harris & Company

Attendees:

Ron Churchill, Department of Conservation	Jeanne Clayton, USFS
John Clinkenbeard, DOC –Geologic Survey	Doug Craig, Department of Conservation
Stevee Duber, Sierra County	Collin Eagle-Smith, USFWS
Mike Fuller, Department of Conservation	Tracy Gidel, Nevada County
Julie Griffith, Abandoned Mines Alliance	Clayton Haas, Department of Conservation
Rick Humphreys, SWRCB	Darcy Jones, SWRCB
David Lawler, BLM	G. Fred Lee, G. Fred Lee & Associates
Sandra Lunceford, Camp, Dresser, McKee	Stephen McCord, LWA
Patrick Morris, CVRWQCB	Eugene Mullenmeister, Shaw Environmental
Donna Podger, CA Bay-Delta Authority	Jim Pompy, Department of Conservation
Alberto Pujol, GEI Consultants	Sarah Reeves, Department of Conservation
Greg Reller, Tetra Tech	Jason Stanbrough, private citizen
Mike Stanbrough, private citizen	Tom Suchanek, USFWS
Dan Wanket, GEI Consultants	Phil Woodward, CVRWQCB - Redding

Agenda:

- I. Welcome, Introductions, and Agenda Review
- II. Announcements
- III. Presentations
 - Reclamation Plans – Jim Pompy
 - Abandoned Mine Remediation – Shasta Copper Mining District – Phil Woodward
- IV. Update on DOC/CALFED Abandoned Mines and Legal Workgroups
- V. Next Meeting

Meeting

I. Welcome, Introductions, and Agenda Review

Carol Atkins, facilitator, welcomed Forum attendees. She reminded participants that the State programs investigating and working on abandoned mines are housed in many different agencies and that the goal for this Forum is to create greater dialog on the issues that these respective agencies are working on, as well as

incorporating dialog with local and federal agencies, and industry. Doug Craig recognized the California Bay-Delta Authority for providing funding for the Forum.

Meeting participants introduced themselves.

The agenda was reviewed and no changes were made.

II. Announcements

Stevee Duber with Sierra County announced that US EPA will be initiating *clean up work at Gardeners Point/Pioneer Pit hydraulic mine*. She also indicated that she has been working with a group, the Abandoned Mine Alliance, on ownership and liability issues. They are investigating such mechanisms as a land trust or other non-governmental agency to oversee property during the clean up phase. It was noted that discussions along these lines have occurred in the Legal Workgroup and that these two groups should share information regarding this.

Mike Stanbrough, a private citizen, presented the Forum members with a letter *requesting action on physical hazards*. The Stanbrough family recently lost a family member when his four wheel drive vehicle fell into an abandoned mine shaft in Del Norte County. AML Forum participants had the following recommendations:

- Contact the Western Governors Association - The website for this organization is <http://www.westgov.org/>. It provides summaries and information on the key issues that the governors have been working on. Contact information for the 21 governors that participate in this group is accessible from this website:
(<http://www.westgov.org/wga/bios/govslst.htm>;
<http://www.westgov.org/wga/bios/gbios.htm>).
- Contact Mr. Udall (Congressman from Colorado) - The general info page for Mr. Mark Udall is <http://congress.org/congressorg/bio/?id=681&lvl=C>. One bill that Congressman Udall has sponsored is H.R. 504, Abandoned Hard Rock Mine Reclamation Act (<http://congress.org/congressorg/issues/bills/?billnum=H.R.504&congress=108>). This link provides details on the bill, and links to more current details/status of the bill.
- Group participants reported that Department of Interior funds collected from coal mining fees are currently used to remediate mines/abandoned mines only in those states that have coal mining. At this time, CA agencies do not have access to those funds, as coal is not mined in CA.
- Currently, CA has just passed legislation that would begin providing funds for mine remediation. These funds are through fees assessed on the mining of gold and silver.

The group discussed the history of this issue and the difficulty that state and federal agency staffs have had in raising awareness and funds to work on remediation of

physical mine hazards. Limited funds have just become available and, with these funds, 57 mine features were remediated last year. Carol indicated that she would follow-up with Mike Stanbrough and transmit this information formally, as well as contact information for appropriate agency personnel.

Janine Clayton indicated that she had spoken to UC Davis Health and Safety representatives regarding annual hazards materials training. UC Davis representatives have indicated that they have the ability to gear an ***eight hour refresher course on abandoned mine issues***. She was interested in determining how many people would be interested in this. She asked that interested people send their names to Carol (catkins@harriscompany.net).

Fred Lee indicated that he had a ***copy of the most recent Five-Year Review Report for Iron Mountain Mine Superfund Site***. Sarah Reeves indicated that she could make copies for those interested in the report.

III. Presentations: **SMARA and Abandoned Mine Remediation – Jim Pompy, Dept. of Conservation**

Jim Pompy began the presentation with an overview of the regulatory framework for post-1976 mines, and elements such as an approved reclamation plan, financial assurances, and enforcement of the reclamation regulations. He also reviewed the statutes that give the Department of Conservation authorization to remediate abandoned mines with consultation with state and local agencies. He indicated that the Department is not held liable when carrying out certain types of remediation pursuant to this section of the Surface Mining and Reclamation Act (SMARA). He also reviewed the definition of abandoned mine which includes: (1) no operator with responsibility and financial ability; (2) no reclamation plan in effect; and (3) no financial assurances exist.

Jim indicated that the SMARA authorization includes:

- Supervision of work that can be performed by Department staff or in cooperation with other government agencies or through contracts
- Reasonable access with consent of property owner or by warrant issued pursuant to the Code of Civil Procedures
- In an emergency, access can occur without consent or warrant

and that SMARA abandoned mine land prioritization occurs for:

- Protection of public health and safety or the environment
- Protection of property
- Restoration of land and water resources

Funding to enforce the SMARA program comes from three separate accounts; (1) the Surface Mining and Reclamation Account; (2) the Mine Reclamation Account; and (3) the Abandoned Mine Reclamation and Minerals Fund Subaccount as well as

other funding mechanisms including CBDA contracts, other agency contracts, grants, purchase orders, and special appropriations.

Jim reviewed different phases of remediation including inventory, site investigations, regulatory review, planning, implementation, supervision, and monitoring. He also highlighted a couple of publications including Rehabilitation of disturbed lands in California – a manual for decision making (by Gail Newton and Vic Claasen) and Application of Geophysics to Acid Mine Drainage Investigations (by Kit Custis).

Jim concluded the presentation by reviewing reclamation activities at several mine sites (e.g., Spenceville, Sulphur Bank, Gambanini, Leviathan, Manchester, and Walker Mines) showing before and after reclamation slides and specific slides pertaining to revegetation.

Abandoned Mine Remediation - Shasta Copper Mining District – Phil Woodward, CVRWQCB

Phil Woodward reviewed the region of the Shasta Copper Mining District and indicated that his agency had recently compiled 20 years of data in an Access database. The data had been used to evaluate the effectiveness of remediation activities and provide the basis for a use attainability analysis (UAA) for West Squaw Creek. The UAA (currently in its second draft) is evaluating the beneficial uses designated to the waterbody for the purpose of modification or redesignation. Mines within this district include the Greenhorn, Iron Mountain, Rising Star, Afterthought, Mammoth, Balaklala, Stowell, and Golinsky.

The majority of these mines are difficult to access. For example, work that proceeded on the Golinsky Mine required a helicopter to bring in equipment. Phil indicated that the access issue challenges staff to be creative with remediation efforts.

The mines within this district were all contributing copper at toxic levels to aquatic life. Phil reviewed the remediation efforts at each of the mines, and then focused on the mines draining into Squaw Creek. The mines along West Squaw Creek are owned by the same company. Three phases of remedial activity occurred at these mines:

Pre-1983	Two Bulkheads Seals Installed
	Weil (1)
	Shasta King (1)
1983 - 1993	Five Bulkhead Seals Installed
	Balaklala (1)
	Early Bird (1)
	Keystone (3)

1994 - 2002 Waste Rock, Diversions and Treatment
 Limestone Injection
 Balaklala Waste Rock Removal
 Surface Water Diversion
 Lined Gabion Channels
 Keystone Clear Water Diversion
 Keystone Wetlands Treatment

Phil reviewed the data collected both pre-seal and post seal, showing a significant decrease in copper levels post seal. He stressed the importance of getting baseline data prior to closure to be able to demonstrate the success of the remediation project. The data should include flow as well as concentration of metals. Phil indicated in this project the initial 1-2 million dollars spent accounted for approximately 50% of the load reduction.

To conclude his presentation, Phil reviewed the current metal sampling locations on Lake Shasta. He discussed the new temperature control device on Shasta Dam and release measures. He noted that installation of the control device and implementation of resulting control measures coincides with the observation of increased metals concentrations downstream. The Regional Board staff is working with the Bureau of Land Management staff and US EPA to reconfigure the control device to rectify this situation.

IV. Update on DOC/CALFED Abandoned Mines and Legal Workgroups

Doug Craig updated the group on two workgroups that the Department of Conservation is hosting:

- (1) Abandoned Mines Workgroup, which consists of state and federal agency staff, and is focused on developing recommendations for CALFED staff to consider when developing the Proposal Solicitation Package for the Proposition 13 Abandoned Mine Remediation Funds, and
- (2) Legal Workgroup, which consists of state and federal agency attorneys and is focused on developing a manual to assist agency managers in determining whether to proceed with a mine remediation project based on current laws and legal decisions.

The Abandoned Mines Workgroup is finishing their draft report and the Legal Workgroup is conducting an internal review of the first draft of their document.

V. Next Meeting

The next meeting has been scheduled for February 19, 2004. It will be held from 9 to noon at the 20th floor conference room at 801 K Street. Carol will work to put together an agenda based on the following suggestions:

- Cleanup Technologies
- Creative Cleanup Efforts
- Mine activation “hoops”

- Presentation on cleanups/remediation efforts at mines such as Iron Mountain Mine, Leviathan, and Penn Mine
- Presentation on metals bioavailability
- A legislative updates agenda item, which could possibly be posted on the Web site – it was noted that the Association of Engineering Geologists prepare this type of information
- Cleanup levels used at mine sites

Carol will follow up on suggestions and develop an agenda for the November meeting.